

Review of the SAP and QAPP for the
Rolling Knolls Landfill Superfund Site, Chatham, New Jersey

QAPP Comments:

1. QAPP Worksheets #12 – For these worksheets, the referenced SOP tables for the measurement performance criteria of the QC samples did not match the table numbers provided with the attached SOPs. The following analyses were affected, SVOCs, VOCs, pesticides and PCBs. Please verify. In addition, the attached analytical SOPs did not include the TAB numbering information that is being used as the SOP numbers provided in these worksheets. Please include the TAB numbering information with the corresponding SOPs. The TAB numbering comment also applies to Worksheet #19 & 30 on page 78, Worksheet #20 on page 81 and Worksheet #23 on page 87. Also, please note the reference to EPA 1613E for mercury should be corrected to 1631E.
2. QAPP Worksheet #13 – The information provided with the worksheet does not relate to any existing data that was used to plan for the current project. The information that was provided in this worksheet should instead be included as part of the data collection activities discussed in Worksheet #17.
3. QAPP Worksheet #15 – The referenced Table 1 for Worksheet #15 did not provide all the information required. This includes the project action limits that are critical in selecting the analytical methods and laboratories that can meet the project's quantitation limit goals. Please revise the worksheet and/or the referenced table. Information regarding what should be included in Worksheet #15 can be found in the following webpage, <http://www2.epa.gov/fedfac/assuring-quality-federal-cleanups>.
4. QAPP Worksheet #17, page 63 – In the discussion for the groundwater samples from the monitoring wells, please provide the rationale for collecting two rounds of samples from the newly installed permanent wells and only one round of samples from the historical permanent wells.
5. QAPP Worksheet #19 and #30, page 78 – It is not clear if the turnaround times specified in the table considered the step out sampling design that will be contingent on the results of the inner samples. Please include this information.
6. QAPP Worksheet #21, page 84 – The field SOP numbering system provided in the worksheet was not included in the attached SOPs. It is not clear how the field crew would be able to reference the SOPs effectively. As provided, the first SOP in the attachment is the porewater sampling procedure, whereas SOP 1 in the worksheet is identified as the water level measurement SOP. This comment also applies to Worksheet #22.
7. QAPP Worksheet #28 – Similar to comment #1, the references to QC acceptance limits in the worksheets needs to be verified. The referenced table numbers did not match the SOP table numbers. In addition, the worksheets specified %R to measure for the

acceptance of the MS and MSD samples. The results between MS/MSD are typically evaluated by relative percent difference (RPD). Please verify the information in the worksheets.

8. QAPP Worksheet #37, page 143 – Please remove the reference to the data validation SOP for VOC in air by Method TO-15. Method TO-15 is not being used for the project.
9. SOP: Porewater Sampling, page 164 – Please remove the reference to collecting samples from a site in Fort Bragg, CA in the first sentence of Section I.
10. SOP: Low-Flow Groundwater Purging and Sampling, page 272 – In step 8 of the sampling procedure, it should include verifying the sampling flow rate and making sure the water level drawdown is less than 0.3 ft below the initial static water level after the disconnecting the flow-through analytical cell prior to sample collection. The submitted SOP is missing the groundwater sampling log that was included as Attachment 1.
11. The approval signatures of some field SOPs are left blank. These SOPs needs to be internally reviewed and approved by the investigative entity prior to submittal.

SAP Comments

1. Section 3.5.4.1 Evaluation of Hydraulic Connection of Northern Ponds to Groundwater, page 25 – Please clarify if precipitation would also be measured during the 4-month period when the surface water levels of the two ponds and water levels in MW-9 and MW-11 are being monitored.
2. Section 3.10.1 Interim Technical Memorandum, page 31 – Please clarify if the interim technical memorandum will also include the sediment and surface water samples. If not, is there separate document that will be submitted to discuss the results of the investigations for those two matrices?
3. Section 4.0 Schedule, page 32 – At the bottom of the page, the schedule did not include the timeline of when the investigations to evaluate the hydraulic connection of the ponds to the groundwater will occur. Please provide this information.